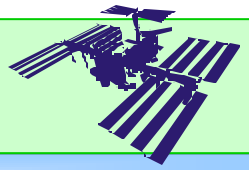
ISS Research Accommodations Status

17 September 2004 (Data through 31 August 2004) *[POC: Dan Hartman/OZ]*



Research Resources

METRIC TYPE	STATUS	ORGANIZATION	ACCOUNTABLE POC	UPDATED
Manager's Level Performance Indicator	R	OZ	Hartman	9/17/04

DESCRIPTOR

- The Research Resources Indicator shows the Program's performance in accommodating the required Research Crew Time and Research Supplies in Middeck, as well as the Program's performance in achieving the minimum commitments for Research Crew Time and Research Supplies in Middeck.
- Note: The overall "Research Resources" status is determined by the status of the most constraining of the two supporting resources: research crew time and research supplies in middeck (and Soyuz/Progress).

STATUS DETAIL

- U.S. Research Crew Time: Red
  - R Increment 9: 60% "L-12" Required Crew Time accommodated.
  - R Increment 9: 60% Most Recent Required Crew Time accommodated.
  - R Increment 10: 37% "L-12" Required Crew Time accommodated.
  - R Increment 10: 61% Most Recent Required Crew Time accommodated.
  - Y Increment 11: 85% "L-12" Required Crew Time accommodated.
- Research Supplies in Middeck *(and Soyuz/Progress)*: Red
  - R 8S: 0% Required Upmass launched.
  - R 14P: 0% Required Upmass launched.
  - R 15P: 0% Required Upmass launched.
  - R 9S: 0% "L-12" Required Upmass allocated and 0% Most Recent Required Upmass accommodated.
  - R 16P: 15% "L-12" Required Upmass allocated.
  - R 17P: 22% "L-12" Required Upmass allocated.
  - R LF1: 50% "L-12" Required Upmass accommodated and G 100% Required Upmass allocated.
  - R ULF1.1: 57% "L-12" Required Upmass accomomodated and 60% "L-12" Required Upmass allocated.

PERFORMANCE INDICATOR METRICS

Metrics / Performance Information

U.S. RESEARCH CREW TIME

Compared to the 12-Month Plan

17 September 2004 (Data through 31 August 2004)

[POC: Dan Hartman/OZ]

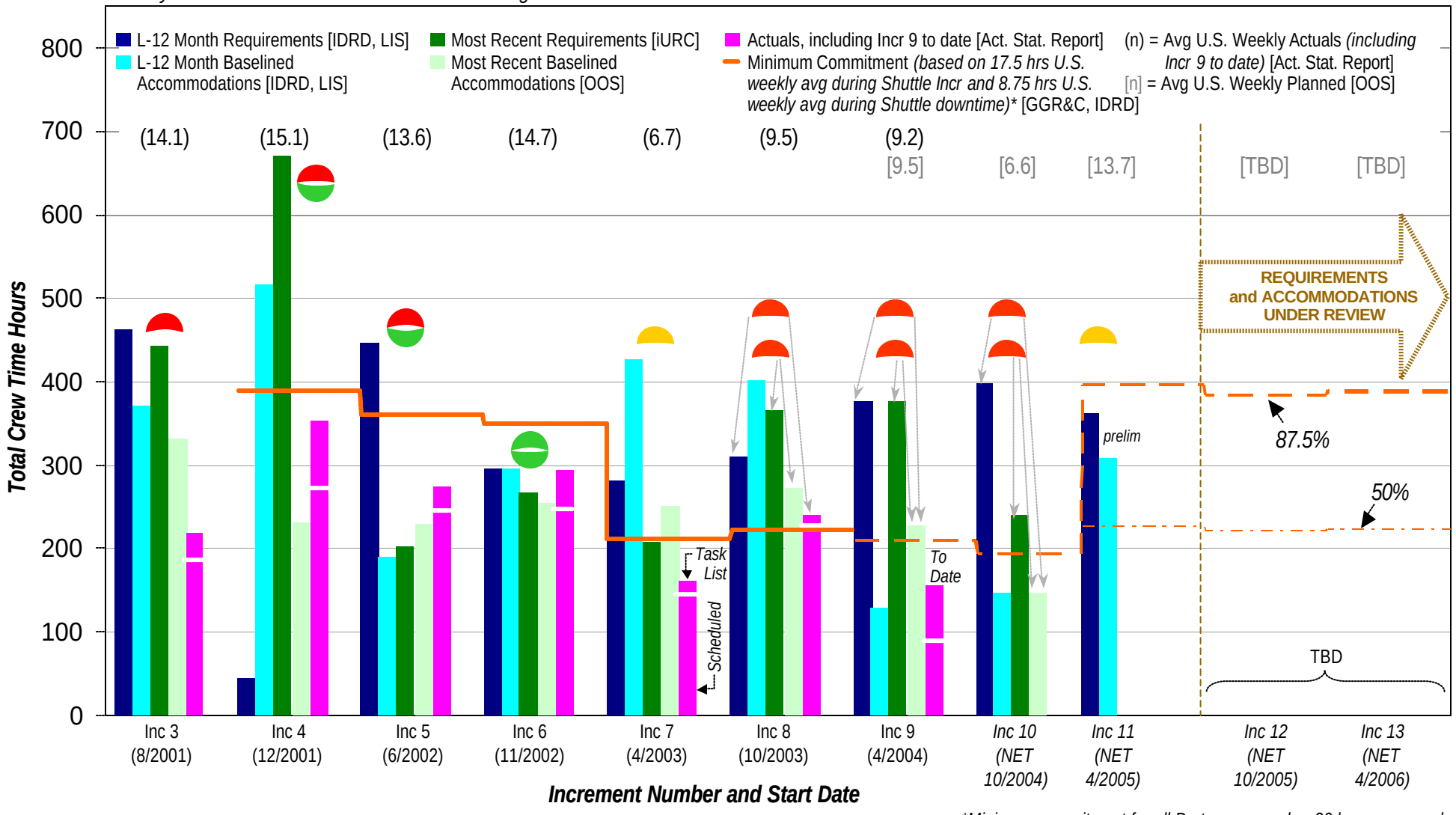
Status: RED

Research Requirements Status: **Red**

Minimum ISS Commitment Status: *N/A*

Note: "L-12" values for Increments 7, 8, 9, 10 & 11 are actually determined closer than 12 months before flight.

- (R) ***Increment 9: 60% "L-12" Required Crew Time accommodated.***
- (R) ***Increment 9: 60% Most Recent Required Crew Time accommodated.***
- (R) ***Increment 10: 37% "L-12" Required Crew Time accommodated.***
- (R) ***Increment 10: 61% Most Recent Required Crew Time accommodated.***
- (Y) ***Increment 11: 85% "L-12" Required Crew Time accommodated.***



**Minimum commitment for all Partner research = 20 hours per week*

RESEARCH SUPPLIES IN MIDDECK (and SOYUZ/PROGRESS)

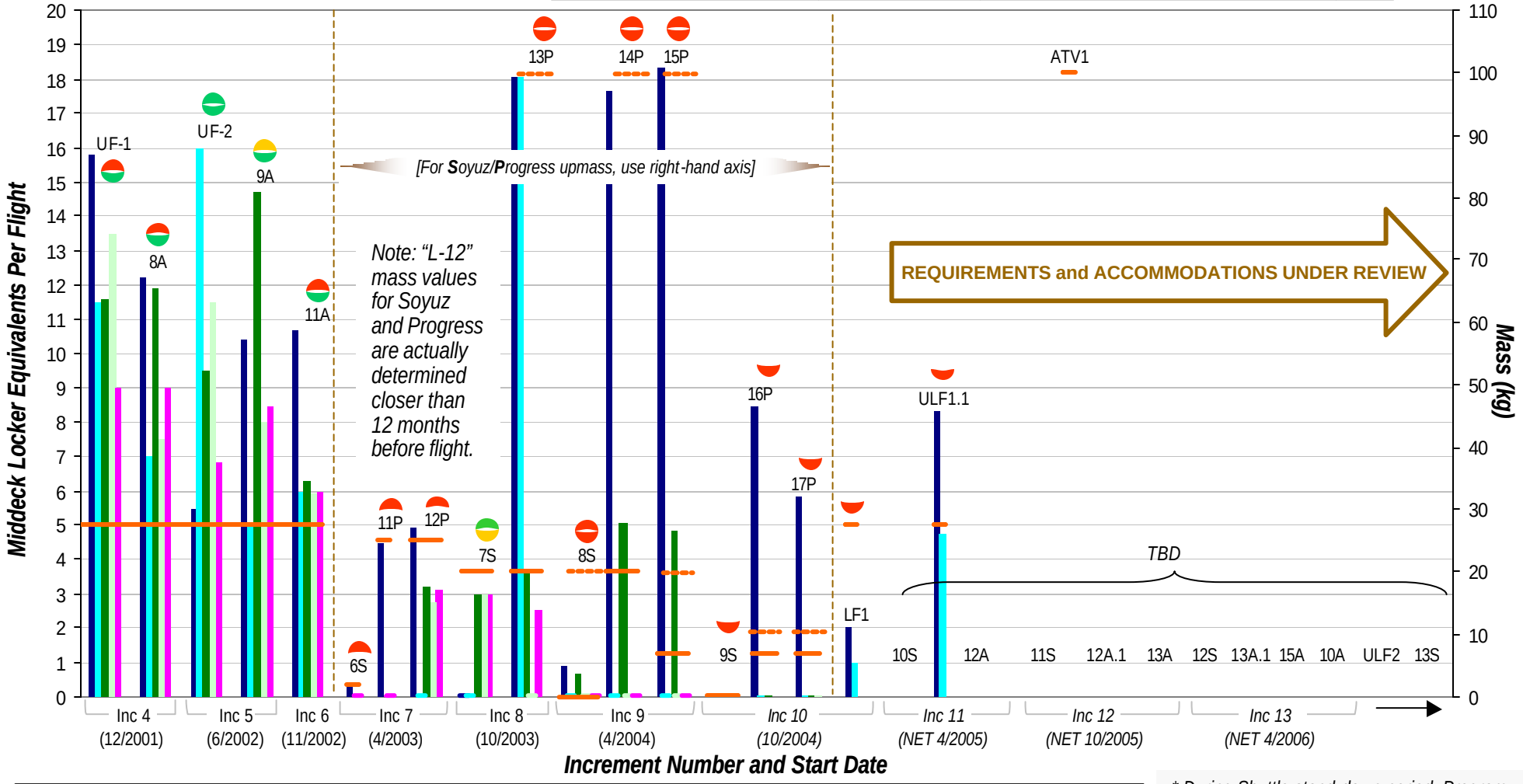
Compared to the 12-Month Plan

17 September 2004 (Data through 31 August 2004) *[POC: Dan Hartman/OZ]*

Status: RED

Research Requirements Status (Incr 9): **Red**
Research Requirements Status (Incr 10): **Red**
Research Requirements Status (Incr 11): **Red**
Program Manager Mass Allocation* Status: **Red**
Minimum ISS Middeck Commitment Status: **Red**

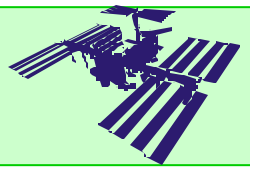
L-12 REQUIRED UPMASS as compared to:	Increment 9			Increment 10				Increment 11		
	8S	14P	15P	9S	16P	17P	LF1	10S	ULF1.1	12A
Most Recent Allocation*	0%	20%	7%	0%	15%	22%	100%	--	60%	--
Most Recent Planned Accommodation	0%	0%	0%	0%	TBD	TBD	50%	--	57%	--
Actual Amount Launched	0%	0%	0%	--	--	--	--	--	--	--



** During Shuttle stand-down period, Program Manager Mass Allocation is tracked instead of ISS Middeck Commitment status.*

U.S. RESEARCH CREW TIME:
Metrics Definitions, Sources, and Status Levels

17 September 2004 (Data through 31 August 2004) *[POC: Dan Hartman/OZ]*



U.S. Research Crew Time*:*

Total per Increment (hrs) and Weekly Average (hrs/wk): The time that the ISS crew performs research tasks for all U.S. and U.S.-sponsored investigations, including time both within and outside of the crews' schedulable work hours. Weekly times are the total Increment crew time divided by the number of Work Weeks.

Work Week: The number of 5-day Work Weeks in an Increment, excluding joint operations (Shuttle and Soyuz) and holidays.

L-12 Month Requirement [IDRD/LIS]: Required research crew time defined 12 months prior to the start of the Increment.

Source: Increments 0 through 6: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 4.2-1, Crew Time Allocations, row reading "Amount subscribed by payloads;" Increments 7 and higher: Increment Definition and Requirements Document for Planning Period X, Annex 5, Increment X Payload Tactical Plan, Table 9.0-1 Increment X United States On-Orbit Utilization Complement. Also, Lead Increment Scientist.

L-12 Month Baselined Accommodation [IDRD/LIS]: Amount of crew time accommodated to research 12 months prior to the start of the Increment.

Source: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 4.2-1, Crew Time Allocations, row reading "USOS Allocation per NAS 15-10110." Also, Lead Increment Scientist.

Most Recent Requirement [iURC]: Required research crew time most recently published prior to the start of the Increment.

Source: Increments 0 through 6: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 4.2-1, Crew Time Allocations; Increments 7 and higher: Increment Definition and Requirements Document for Planning Period X, Annex 5, Increment X Payload Tactical Plan, Table 9.0-1Increment X United States On-Orbit Utilization Complement. Also, most recent Interim User Requirements Collection (iURC).

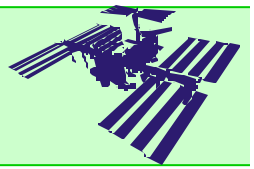
Most Recent Baselined Accommodation [OOS]: Amount of crew time accommodated to research most recently published prior to the start of the Increment.

Source: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 4.2-1, Crew Time Allocations; if available, the Final Integrated On-Orbit Summary, i.e., most recently published prior to the start of the Increment.

Actuals [Act Stat Report]: Amount of crew time actually devoted to research during the entire Increment, including both scheduled time and time spent executing research activities on the Task List.

U.S. RESEARCH CREW TIME:
Metrics Definitions, Sources, and Status Levels

17 September 2004 (Data through 31 August 2004) *[POC: Dan Hartman/OZ]*



U.S. Research Crew Time (continued)

Source: Activity Status (Act Stat) Report (from JSC) and Summary Crew Tracking Matrix, provided weekly by the Payload Operations Integration Center at MSFC.

Average Weekly Actuals [Act Stat Report]: Actual Increment crew time divided by the actual number of Work Weeks in the Increment.

Source: Activity Status (Act Stat) Report (from JSC) and Summary Crew Tracking Matrix, provided weekly by the Payload Operations Integration Center at NASA/MSFC.

Average Weekly Planned [OOS]: Planned Increment crew time, as given by the Most Recent Baselined Accommodations, divided by the most recently planned number of Work Weeks in the Increment.

Source: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 4.2-1, Crew Time Allocations. Also, if available, the Final Integrated On-Orbit Summary, i.e., most recently published prior to the start of the Increment.

Minimum Commitment [GGR&C, IDRD]: The minimum value of research crew time committed by the ISS Program Manager. Computed by multiplying the minimum weekly average commitment (17.5 hours per week for U.S. and U.S.-sponsored investigations) by the most recently planned number of Work Weeks in the Increment.

Source: Hours: Generic Ground Rules and Constraints; Increment Duration: Increment Definition and Requirements Document for Planning Period X (most recently published prior to start of Increment), Increment X Summary.

Status Level Definitions

Research Requirements Status

- Most recent accommodations (or actuals) are:

Green: At least 90% of L-12-month requirement.

Yellow: 80-90% of L-12-month requirement.

Red: Less than 80% of L-12-month requirement.

Minimum ISS Commitment Status

- Most recent accommodations (or actuals) are:

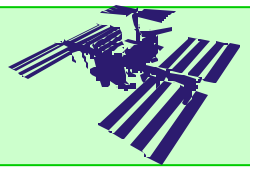
Green: At least 100% of the minimum commitment.

Yellow: 90-100% of the minimum commitment.

Red: Less than 90% of the minimum commitment.

U.S. RESEARCH SUPPLIES IN MIDDECK (and SOYUZ/PROGRESS): Metrics Definitions, Sources, and Status Levels

17 September 2004 (Data through 31 August 2004) *[POC: Dan Hartman/OZ]*



Research Supplies in Middeck

The number of research middeck lockers and other research supplies and equipment launched in the middeck on each shuttle flight to the ISS. Measured in middeck locker equivalent (MLEs), I.e., the number of volumes equal to the volume of a middeck locker. The middeck is used primarily to transport perishable research samples and equipment to and from the ISS.

L-12 Month Requirement: Required middeck volume defined 12 months prior to the planned launch of the first Shuttle flight in an Increment.

Source: Increments 0 through 4: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 5.0-2 Ascent/Descent Utilization Manifest Summary; Increments 5 and higher: Increment Definition and Requirements Document for Planning Period X, Annex 5, Payload Tactical Plan Manifest, PMIT Ascent Payload Summary.

L-12 Month Baselined Accommodation: Volume of the number of middeck lockers (in MLEs) accommodated to research 12 months prior to the planned launch of the first Shuttle flight in an Increment.

Source: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 5.0-1, Ascent/Descent Accommodation Summary.

Most Recent Requirement: Required middeck volume most recently published prior to the planned launch of the first Shuttle flight in an Increment.

Source: Increments 0 through 4: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 5.0-2 Ascent/Descent Utilization Manifest Summary; Increments 5 and higher: Increment Definition and Requirements Document for Planning Period X, Annex 5, Payload Tactical Plan Manifest, PMIT Ascent Payload Summary.

Most Recent Baselined Accommodation: Volume of middecks accommodated to research most recently published prior to the planned launch of the first Shuttle flight in an Increment.

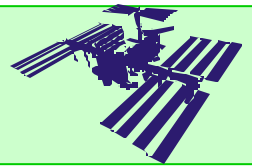
Source: Increment Definition and Requirements Document for Planning Period X, Main Volume, Table 5.0-1, Ascent/Descent Accommodation Summary.

Actuals: Volume of middecks containing research utilization equipment actually launched on each Shuttle flight during an Increment.

Source: Increments 0 through 4: Increment Definition and Requirements Document for Planning Period X, Annex 5, Payload Tactical Plan Manifest Summary, Ascent Summary; Increments 5 and higher: As Flown Rack Layout from the Crew Compartment website.

U.S. RESEARCH SUPPLIES IN MIDDECK (and SOYUZ/PROGRESS): Metrics Definitions, Sources, and Status Levels

17 September 2004 (Data through 31 August 2004) *[POC: Dan Hartman/OZ]*



Minimum ISS Middeck Commitment: The minimum value of research supply volume in the Middeck committed by the ISS Program Manager.

Program Manager Mass Allocation: During the Shuttle down-time following the Columbia STS-107 accident, the ISS Program Manager is allocating a certain amount of upmass for research on the Soyuz and Progress flights. This allocation is made prior to joint approval with the Federal Space Agency.

Research Supplies in Soyuz and Progress: During the Shuttle down-time following the Columbia STS-107 accident, all research supplies were launched on Soyuz or Progress vehicles. Requirements, allocations, accommodations, and actuals are shown.

Status Level Definitions

Research Requirements Status =
Most Recent Accommodation or Actual ÷ L-12-month Requirement

- Most recent accommodations (or actuals) are:

Green: At least 90% of L-12-month requirement.

Yellow: 80-90% of L-12-month requirement.

Red: Less than 80% of L-12-month requirement.

Minimum ISS Middeck Commitment Status =
Most Recent Accommodation or Actual ÷ Minimum Commitment

- Most recent accommodations (or actuals) are:

Green: At least 100% of the minimum commitment.

Yellow: 90-100% of the minimum commitment.

Red: Less than 90% of the minimum commitment.

Program Manager Mass Allocation Status =
L-12-month Requirement or Actual ÷ Allocation

- L-12-month Requirements (or actuals) are:

Green: At least 90% of Program Manager Mass Allocation.

Yellow: 80-90% of Program Manager Mass Allocation.

Red: Less than 80% of Program Manager Mass Allocation.